

AMENDMENTS TO THE CLAIMS

Listing of Claims:

This listing of claims is to replace all previous listings.

- 1-29. Cancelled
30. (New) A composition for controlling viability of a tissue including:
a potassium channel opener or adenosine receptor agonist;
a compound for inducing local anaesthesia; and
a compound for inhibiting transport of sodium and hydrogen ions across a plasma membrane of a cell in the tissue.
31. (New) A composition according to claim 30 wherein the compound for inhibiting transport of sodium and hydrogen ions is selected from the group consisting of: N-amidino-3,5-diamino-6-chloropyrzine-2-carboximide hydrochloride dehydrate, EIPA, cariporide (HOE - 642), eniporide, Triamterene, EMD 84021, EMD 94309, EMD 96785, EMD 85131, HOE 694, B11 B-513 and T-162559.
32. (New) A composition according to claim 30 wherein the compound is N-amidino-3,5-diamino-6-chloropyrzine-2-carboximide hydrochloride dehydrate.
33. (New) A composition according to claim 30 wherein the concentration of the compound is between about 1nM to 1mM.
34. (New) A composition according to claim 30 wherein the composition further includes at least one compound selected from the group consisting of:
a compound for reducing the uptake of water by a cell in the tissue;
diazoxide;
a source of magnesium in an amount for increasing the amount of magnesium in a cell

Applicants: Geoffrey P. DOBSON et al.
Serial No. To Be Assigned

in the tissue; and

a source of calcium in an amount for decreasing the amount of calcium within a cell in the tissue.

35. (New) A composition for controlling viability of a tissue including:

a potassium channel opener or adenosine receptor agonist;

a compound for inducing local anaesthesia; and

an antioxidant.

36. (New) A composition according to claim 35 wherein the antioxidant is selected from the group consisting of: allopurinol, carnosine, Coenzyme Q 10, n-acetyl-cysteine, superoxide dismutase (SOD), glutathione reductase (GR), glutathione peoxidase (GP), catalase and the other metalloenzymes, glutathione, U-74006F, vitamin E, Trolox (soluble form of vitamin E), Vitamin C, Beta-Carotene (plant form of vitamin A), selenium, Gamma Linoleic Acid (GLA), alpha-lipoic acid, uric acid (urate), curcumin, bilirubin, proanthocyanidins, epigallocatechin gallate, Lutein, lycopene, bioflavonoids, polyphenols, trolox(R), dimethylthiourea, tempol(R), tocopherol, ascorbic acid, carotenoids, coenzyme Q, melatonin, flavonoids, polyphenols, aminoindoles, probucol, nitecapone, 21-aminosteroids, lazarooids, sulphhydryl-containing compounds, ACE inhibitors, beta-mercaptopropionylglycine, 0-phenanthroline, dithiocarbamate, selegilize, desferrioxamine (Desferal), 5'-5-dimethyl-1-pyrrolione-N-oxide (DMPO) and a-4-pyridyl-1-oxide)-N-t-butylnitron (POBN).

37. (New) A composition according to claim 35, wherein the antioxidant is allopurinol.

38. (New) A composition according to claim 35, wherein the concentration of the antioxidant is between about 1nM to 100uM.

39. (New) A composition according to claim 35 wherein the composition further includes at least one compound selected from the group consisting of:

a compound for reducing the uptake of water by a cell in the tissue;
diazoxide;
a source of magnesium in an amount for increasing the amount of magnesium in a cell in the tissue; and
a source of calcium in an amount for decreasing the amount of calcium within a cell in the tissue.

40. (New) A method of controlling the viability of a tissue including the step of contacting the tissue with a composition according to claim 30.

41. (New) A method according to claim 40 wherein the composition is treated to oxygenate the composition prior to or while the composition is in contact with the tissue.

42. (New) A method according to claim 40 wherein the tissue is contacted by continuous perfusion of the composition the composition being at a temperature of about 10°C.

43. (New) A method of controlling the viability of a tissue including the step of contacting the tissue with a composition according to claim 35.

44. (New) A method for arresting a tissue including the step of contacting the tissue with a composition according to claim 30.

45. (New) A method for arresting a tissue including the step of contacting the tissue with a composition according to claim 35.

46. (New) A method for preserving a tissue including the step of contacting the tissue with a composition according to claim 30.

Applicants: Geoffrey P. DOBSON et al.
Serial No. To Be Assigned

47. (New) A tissue preserved by the method according to claim 46.
48. (New) A heart tissue preserved tissue according to claim 46.
49. (New) A method for preserving a tissue including the step of contacting the tissue with a composition according to claim 35.